

Scunthorpe.
Doncaster.

Feb 4. 9th 1899.

Sir

Herewith I have the honour to hand
you my eighth annual report, being that for
the year which ended on Dec^r. 31st last. It is
made in accordance with the regulations of the
Local Government Board, as made in their
Order dated March 1891.

I am

Sir

Yours

obedient servant

M. R. J. Behrendt.

M. O. H

To

Joseph Fletcher, Esq^r. J. P.

Chairman of the Urban District
Council.

Eighth Annual Report on the Health of the Scunthorpe Urban District (1898).

Infectious & Zymotic Diseases.

A. Notifiable. — The register of notifications contains 246 entries, referring to Diphtheria, Enteric Fever, Erysipelas, Puerperal Fever, and Scarlatina, as follows: —

(1) Diphtheria — 5 cases, of these 1 was fatal. The subject a man aged 30 years, had been to Ludburgh on Oct 6th. On Oct 8th he went thence to stay with his mother at Louth, & there remained till Oct 17th when he returned home. On the 20th he complained of his throat, & next day he was unable to get up. The patient's wife stated that the contents of the soft water cistern at the house in Louth were very foul, also that the patient's mother was suffering from some form of sore-throat. — An examination of some material from this man's throat was made by the Clinical Research Association & proved to contain the specific organism of Diphtheria. — The remaining 4 cases occurred in houses where scarlatina was present. Material from the throats of 2 was sent for examination, but the reports received were negative. The cases were probably scarlatinal throats with exudation.

(2) Enteric Fever — 11 cases with 3 deaths, A case was reported in February (Chapel Street); 3 in March (West Street 2 next door to each other, & Allanby Street 1, not many yards from these); 1 in August (Crosby Road); 2 in September (Manley & High Streets); & 4 in October (Manley Street 2, Church Street 1, Winterton Road 1). — In West Street both houses had a well in common. Analysis of the water gave the following results: Free Ammonia .04, & albumenoid ammonia .22 pts per 1000000; nitrites were also found. The water from the well in Allanby Street gave the following results: Nitrites present; Potassium Permanganate solution rapidly decolorized; Free Ammonia .28 & Albumenoid Ammonia .48 pts per 1000000. Both waters are very impure, containing organic matter. — The cases in High Street & Winterton Road seem to have had a common origin, viz the well belonging to the High Street premises where one patient lodged & the other had his place of business. The water was analysed with the following result: — Nitrites were found; Free & Albumenoid Ammonia were obtained at amounts equal to .138 & .3 pts per 1000000 respectively. Here again the water was of bad quality. — The earlier case in Manley Street was doubtless an importation, for the patient came there ill from Doncaster. The cases in Crosby Road & Church Street probably had a common origin, the patients being husband & wife, but their illness was separated by a considerable interval of time. — With

regard to the case in Chapel Street, its mildness & very short duration at least leave room for doubt as to its true nature. The other cases in Manley Street are also connected with drinking water. The wells here are the soonest drained of their contents (one I was told of yielded only $1\frac{1}{2}$ pails in 24 hrs) & if in any way polluted would in drought be more dangerous to use owing to greater concentration of their contents. — The bulk of these cases occurred in the driest & hottest weather, viz from August to October, when diarrhoea also prevailed extensively.

(3) Erysipelas: — 11 cases, one following injury, occurred in various parts of the town.

(4) Puerperal Fever — 2 cases were reported.

(5) Scarlatina — 217 cases with 12 deaths, 122 houses being invaded. — In Dec^r 1897 several cases had been reported, 5 more notifications were received in Jan. 1898. 1 case occurred in Feb^r 1 more in March. At the end of April 3 cases were reported, in May there were 3 more all in one house. At the end of June there were 3 cases. In July there were 8; 44 followed in August; in Sept^r 24; in Oct^r 35; in Nov^r 47; & in Dec^r 42. These are the known cases.

B. Not notifiable: —

(1) Diarrhoea: — During Aug., Sept^r & Oct^r there was much diarrhoeal disease. Tab. A shews that 33 deaths were attributed to it. Of these 29 were of children under 5 years old, & of these again 27 were under 1 yr old, shewing that the disease was dangerous only to the very young & infected. Although deaths occurred chiefly among infants, the disease was by no means confined to them — all ages suffered, & persons in all circumstances of life were affected. — The time of prevalence was as usual the hottest & driest part of the year, when subsoil water was low & wells tended to run dry. Emanations from the sewers were also very common, owing to the rapid drying of the water-seals in the road gullies. Doubtless these were factors of importance in causing the disease.

(2) Phthisis & Tuberculosis. — 9 deaths were registered from Phthisis, & 5 of some one or other of the remaining forms of Tuberculosis. There were therefore 14 deaths from Tubercular diseases, equivalent to a rate of over 2 per 1000 of the population. The opinion that Phthisis is an infectious disease is an old one, but has gained ground rapidly in recent years. The discovery of the tubercle bacillus has not only contributed much to the more general acceptance of the view that Phthisis is infectious, but has led to what is of much greater value, namely a serious examination of the question: Are Phthisis & other Tubercular diseases preventable? Considering that much of this kind of disease is got by the consumption of tuberculous material in milk & meat, also ^{that} it is fostered by overcrowding, ~~want of~~

defective ventilation, want of sunlight & dampness of dwellings; that its seeds are ever present in the chambers occupied by sufferers from it, & can there by carelessness be sown in the fresh soil there to germinate & widen the circle of its ravages, it does not seem at all an impossible task to considerably lessen the number of deaths from Tubercular ^{diseases} which at present are, over the whole kingdom, more numerous than the deaths from all the acute specific diseases put together.

(3) Acute Pneumonia — 5 deaths were registered from this disease which appears to be rather common in the district.

(4) Influenza — contributed 2 deaths to the list of mortality, but does not appear to have been very prevalent.

(5) Whooping Cough — 1 death is attributed to this disease in the returns.

Other Diseases.

Of other than zymotic or infectious diseases occurring in the district, it is only necessary to notice diseases of the Respiratory Organs, & Cancer. Of the former is to be noted that in the past year they caused 17 deaths (excluding deaths from Pneumonia), therefore more than double the number of the year before. — Cancer also appears in the returns somewhat more frequently than in previous years, 5 cases having been certified as dead from this disease. The yearly numbers of deaths from Cancer since 1891 are as follows: —

1891	1892	1893	1894	1895	1896	1897	1898
1	1	0	4	1	3	2	5

Prevention of Disease

Such measures as circumstances appeared to indicate were taken to prevent the spreading of infectious diseases. Where possible isolation of the patients was enjoined. Disinfectants where needful were supplied, & instructions for their use given. Children from infected homes were ordered to be kept from school. Lists of such homes were sent to the teachers, & they were requested not to receive any child suffering from sickness, sore throat, rashes or feverishness without medical certificates of freedom from infection. — Where possible rooms or houses were submitted to fumigation with sulphur dioxide, & this was followed by general cleaning of the sickrooms. In the enteric fever cases special precautions were taken to disinfect & in the disposal of the excreta. Orders were also given to boil all water required for drinking purposes taken from wells the water of which lay under suspicion; to have them entirely closed, although the most safe measure, seemed under the circumstances of the district not advisable.

Inspection of the District

As a result of the inspections of the district numerous nuisances have

been dealt with. Most important among these were nuisances from badly paved yards. The improvement and greater healthiness of localities where in past years the paving of yards with impervious material has by order of the Council been carried out leads to the conclusion that work done in this direction during last year will also add very greatly to the healthiness of the localities concerned. - The accompanying report furnished by Mr. Cobban shows well what work has been done in his department.

Statistical.

The Total Area of the District in acres is 1041. - The number of Inhabited Houses at the end of the year was 1239. - The number of Births registered in the year was 287. Of these 153 were boys + 134 girls. - The number of Deaths registered in the same time was 144, viz 77 males + 67 females. - Assuming the Population to have increased at the same rate since 1891 as it did between 1881 and 1891, it should have been 5041 in the middle of the year, & estimated on this basis the Birth Rate has been equal to one of 57.1 & the Death Rate equal to one of 28.5 per 1000 of population. These rates are very high, & their correctness depends on the correctness of the basis on which they rest. The largeness of the birth rate especially arrests attention & suggests that from some cause it is overstated. Comparison of the number of inhabited houses with the number of inhabitants at once shows that the latter number is underestimated, for then there would be no more than 3.1 persons to each house. A former enquiry showed that this proportion was 5.4, & taking a street, by no means the most crowded at present, it was found to contain on an average nearer 6 than 5 persons to each house. Thus at the end of the year the number of inhabitants must have been about 6690. In the middle of the year it would be somewhat less, & not to overstate it may be taken to have been 6200. Calculated on this basis the respective rates would be 46.2 & 23.2 per 1000 inhabitants. These rates although large still, are probably much nearer the truth. In order however to compare the last with the preceding years without altering anything in the method of working, the assumption that the population has increased at a definite rate has been adhered to. - The number of infants under 1 year old who died was 62; thus the rate of infantile mortality, viz the number of deaths of children under 1 year old to 1000 births, was 216.3

Concluding Remarks.

I. From Tab 2 appended to this report it will be seen that the number of deaths of children under a year old has been larger than in any year since 1891, viz 62 as against 41 of the year before. These deaths were made up as follows: - Diarrhoea 27; Deficient vitality 19; Bronchitis 8; & Tuberculosis 4; leaving 4 for other complaints. Diarrhoea then has been the chief cause of this increased mortality of infants. In none of the years 1891 to 1897 have deaths from this

disease been so numerous, for their number has been more than double the previous highest, viz 10 in 1895. Allowing for the large increase in the number of births, viz 50 over the previous year's total, & therefore the greater amount of susceptible material, the largeness of the mortality from diarrhoea is not merely an apparent, but a real one, & is an evidence of how general the complaint must have been. Among the predisposing causes to diarrhoea in infants must be reckoned in the front rank, faulty feeding. When infants are hand fed, unsuitable food tends to set up an irritable condition of the digestive tract. This makes the children not only more prone to attack, but also less able to throw it off. The experience of medical men generally goes to show that there is much ignorance abroad with respect to what is proper food for infants, & how necessary are extreme care & cleanliness in its preparation & storage; & suggests that means should be taken to diffuse a better knowledge of the subject among those who have charge of infants.

II. Tab. 2 shows that the age group "1 & under 5 years" also has a greater mortality than in previous years. Of the 24 deaths there recorded, 9 were from Scarlatina, & 4 each from Bronchitis, Meningitis, & Diarrhoea, leaving 3 for other complaints. This increase is therefore chiefly due to Scarlatina, the total deaths from which were 12, giving on the known cases a rate of nearly 55.3 per 1000. Among the causes which help to spread Scarlatina are the following: Mild cases not recognized as Scarlatina. Sore throats capable of infecting the susceptible, but having nothing characteristic about them. Impossibility to isolate patients satisfactorily ⁱⁿ at their homes, except in a very few cases. Imperfect disinfection, or more commonly none at all, of clothing. Ignorance of the risks of exposure to infection. It is not uncommon for mothers to take their children to see the remains of a companion dead of Scarlatina, & it is difficult to understand what can be the object of such reckless exposure to infection; only pure ignorance can account for it.

III. The vaccination of infants in the district, as indeed nearly all over the country, has greatly diminished. Thus by an increasing amount of susceptible persons is growing up, & in case of an importation of small pox, there is every probability of its becoming epidemic. At present no means of isolation exist, & it must be borne in mind that only by readiness & prompt action will it be possible in some measure to neutralize the neglect of the most reliable safeguard against smallpox.

M. R. J. Behrendt.

Feb 9th 1899.

M. O. H.

Table 1.

Shewing Births, Birth Rate; Deaths, death Rate & Population for the years 1891 to 1898.

Year	Births	Bth. Rate	Deaths	th. Rate	Population.
1891	140	39.2	65	18.2	3512
- 2	154	40.5	45	11.8	3737
- 3	170	43.2	61	15.5	3929
- 4	196	47.4	60	14.5	4130
- 5	199	45.8	86	19.8	4341
- 6	229	50.4	68	14.9	4563
- 7	237	49.4	101	21	4796
- 8	287	57.1	144	28.5	5041

Table 2.

Shewing deaths arranged in 6 age groups, and the infantile mortality in the years 1891 to 1898.

Year	under 1	1u 5	5u 15	5u 25	25u 65	65 over	Deaths under 1 yr to 1000 births.
1891	21	5	6	3	14	10	193
- 2	26	6	0	2	9	2	169
- 3	22	16	0	5	11	7	129
- 4	22	11	1	0	15	5	143
- 5	40	8	0	8	22	8	201
- 6	29	12	2	1	15	9	126.6
- 7	41	20	1	4	20	15	173
- 8	62	24	12	6	22	18	216.3

Scunthorpe

Feb 9th 1899.

To

M. R. J. Behrendt, Esqre.

M. O. H.

Dear Sir,

I herewith hand you a report on the work done in my department during the year 1898, and am

Yours faithfully

A. Mo. Cobban.

Inspector & Surveyor.

Report of the Inspector and Surveyor (Jan 1st to Dec 31st 1898)

Inspections of the District. - The district has been regularly inspected. As a result many nuisances have been removed. 61 court-yards have been made impervious to water. At Swanton Terrace where nuisances from accumulations of household refuse were common, 40 houses have been provided with galvanized iron receptacles, & this has brought about great improvement. - Two houses were by order required to be cleansed & white washed, & to be provided with satisfactory privy accommodation. Workshops, Bakeries, & Milkshops have been regularly inspected, but have offered nothing to complain of. - In one case a prosecution had to be instituted against a butcher for having in his possession bad meat. He was fined £10 + costs. Proceedings had also to be taken in 2 cases for infringement of the Byelaws in regard to buildings; in one case a conviction was obtained, & a penalty of 40/- + costs imposed; the other failed on a technical point.

Increase of the Town. - The town has grown considerably during the year. 138 ^{new} houses were certified fit for occupation, as against 102 in the year before. Plans for new houses to the number of 130 as compared with 120 in the previous year have been passed. A count of the occupied houses was made, their number was 1239.

Private Street Works. Under the Private Streets Act 4 Streets have been put into order & taken over; an addition of 756 yds of streets, exclusive of the back ways. On the North side of Frodingham Road, plans, estimates &c were made in respect to 8 Streets of a total length of 1224 yards, also 14 back ways, to be dealt with under the same act, & an enquiry on behalf of the Local Government Board was held by R. H. Picknell, Esq^r on application for a loan for this work, which is now finished, & has entailed the laying of 4602 ^{sq} yds of tar pavement; 2448 yds of channelling; 1250 yds kerbing & 8802 sq. yds of road way. There have also been put down 50 Sharps

gully-traps, 483 yds of 6" & 107 yds of 9" storm-water pipe sewer.

Prospective work under this head is the continuation of the pavement on the north side of Fordingham Road, from Allanby Street to Parkinson Road, & since Clarke, Teale, Allanby, Shelford & the continuation of West Streets are now completely occupied with buildings, they are quite ready for being dealt with under the Pot. Street Wks. Act.

Repairs & Maintenance of Highways. - In this there have been used 250 tons of granite, 150 tons of broken slag, & 45 tons slag screenings at a cost of £168.8 8½. Manual Labour cost £196.9.9, & Team labour £47.9.7½.

Water Supply. - An enquiry was held on behalf of the Local Government Board & a loan for works obtained. The work of boring has been taken in hand & is making progress.

The particulars of the year's work is appended in tabular form.

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Totals
Buildings in process in course of erection	81	87	68	88	81	92	74	80	86	85	98	90	1010
Special inspections for nuisances	4	8	3	5	8	7	2	5	7	4	8	6	67
Ord. Inspections	187	214	161	262	198	190	141	208	190	152	160	172	2165
Bakeries, Milkshops	11	15	12	16	11	14	7	16	19	11	13	9	154
Orders served	5	9	10	6	8	9	3	4	8	4	6	11	83
													3479
Houses certified													138
Plans passed (Houses)													130
" " (Others)													11
" Rejected													18

The 83 orders covered the following: -

To abate nuisance from drains	5
" " " unpaved & yds (61)	9
" " " animals	1
" " " privies	10
" " " accumulations of manure	11
" " " other offensive matter	2
Under Dairies & Milkshops order	13
To cleanse & whitewash houses.	2
To provide receptacles for household refuse (40 houses)	1
Owing to contravention of Building Bye-laws	1

A. M. Cobban.

